XV.—*New or little-known* Tipulidæ (*Diptera*).—V. *Ethiopian Species*. By Charles P. Alexander, Ph.D., Urbana, Illinois, U.S.A.

The present paper is a continuation of the preceding parts under this title. The holotypes are preserved in the writer's collection, except where noted to the contrary.

Dicranomyia (*Thrypticomyia*) *nigeriensis*, sp. n.

General coloration brown, the mesonotum reddish brown; pleura testaceous; legs with the metatarsi entirely white; wings pale brownish subhyaline; stigma elongate, dark brown; Sc_1 ending opposite the origin of *Rs*.

Male.—Length 6 mm.; wing 7–7·2 mm.

Female.—Length 6 mm.; wing 6·8 mm.

Rostrum pale brown; palpi dark brown. Antennæ dark brown. Head dark brown, grey pruinose.

Mesonotum reddish brown. Pleura testaceous. Halteres very elongate, dark brown. Legs with the coxæ and trochanters testaceous; femora dark brown, paler basally; tibiæ dark brown; tarsi pure white, the terminal segments scarcely darkened. Wings pale brownish subhyaline; stigma elongate, dark brown; veins dark brown. Venation: Sc_1 ending opposite the origin of *Rs*, Sc_2 a short distance from the tip, Sc_1 about equal to the basal deflection of Cu_1; penultimate section of R_1 from one and one-half to twice r; basal deflection of R_{4+5} strongly arcuated; in some specimens the inner end of cell 1*st* M_2 is strongly arcuated, less so in other specimens; basal deflection of Cu_1 beyond mid-length of cell 1*st* M_2.

Abdomen dark brown.

Hab. Nigeria.

Holotype, ♂, Effon Forest, November 10, 1920 (*A. W. J. Pomeroy*).

Allotopotype, ♀.

Paratopotypes, 2 ♂'s.

Holotype in the collection of the British Museum (Natural History).

Dicranomyia nigeriensis is related to *D. seychellensis* (Edwards), from which it differs in the uniformly white tarsi, the elongate halteres, and the details of the wing-venation. The known species of the subgenus *Thrypticomyia* occur in the Ethiopian Region (2), Palæarctic Region, Japan (1), Oriental Region (2), and the Australian Region (4).

Dicranomyia venustula, sp. n.

General coloration light yellow; antennæ yellow, the first scapal segment dark brown; legs yellow, the tips of the femora and tibiæ narrowly infuscated; wings light yellow, spotted with brown; *Sc* short, *Rs* square at origin.

Male.— Length 4·4–5 mm.; wing 4·6–5 mm.

Female.—Length 5·5 mm.; wing 6 mm.

Rostrum and palpi dark brown. Antennæ light yellow, the first scapal segment dark brown; in the male, the flagellar segments are short-petiolate basally and are provided with long verticils. Head dark brown, indistinctly pruinose.

Mesonotum and pleura pale whitish yellow, unmarked. Halteres yellow. Legs yellow, the tips of the femora narrowly dark brown, of the tibiæ still more narrowly dark brown; terminal tarsal segments infuscated. Wings with a faint yellowish tinge, sparsely variegated with brown spots, arranged as follows: At tip of *Sc* and origin of *Rs*; at stigma; seams along the cord and outer end of cell 1*st* M_2; spots at the ends of veins R_{2+3}, M_{1+2}, M_3, Cu_1, Cu_2, and the anal veins, the two latter the largest; veins yellow, brown in the infuscated areas. Venation: *Sc* short, Sc_1 ending immediately beyond the origin of *Rs*, Sc_2 at tip; *Rs* square at origin or with the angle of curvature proximad of the actual origin, sometimes spurred; inner ends of cells R_3 and 1*st* M_2 lying far proximad of cell R_5; cell 1*st* M_2 closed, shorter than vein M_{1+2} beyond it but longer than M_3; basal deflection of Cu_1 at or immediately before the fork of *M*; Cu_2 shorter than the basal deflection of Cu_1.

Abdomen yellow, the apices of tergites narrowly infuscated, broadest medially. Male hypopygium with the pleural appendage elongate and slender, cylindrical, directed proximad and decussate with its mate across the genital chamber. Ovipositor with the sternal valves blackened at base.

Hab. Cameroun.

Holotype, ♂, Elat, 1920 (*J. A. Reis*).

Allotopotype, ♀.

Paratopotypes, 3 ♂'s.

D. venustula is most closely related to the larger *D. woosnami*, Alexander (East Africa).

Dicranomyia pauciguttata, sp. n.

Related to *D. guttula*, Alexander (Portuguese East Africa) general coloration yellowish brown ; thoracic pleura with a broad dark brown longitudinal stripe ; wings grey with a sparse brown dotting along the veins ; *Sc* short ; cell 1*st* M_2 irregular in shape, lying far out in the wing-membrane.

Male.—Length 4·8 mm. ; wing 5·5 mm.

Female.—Length 5 mm. ; wing 6 mm.

Rostrum and palpi dark brown. Antennæ short, dark brown ; basal flagellar segments subglobular, gradually passing into oval. Head greyish pruinose.

Mesonotum yellowish brown, covered with a yellow pollen ; four indistinct longitudinal brown stripes, the intermediate pair indicated only in front. Pleura testaceous with a broad and conspicuous but ill-delimited fuscous longitudinal stripe extending from the cervical sclerites to the base of the abdomen. Halteres yellow, the knobs pale brown. Legs with the coxæ brown ; trochanters brownish testaceous ; femora yellowish brown, the extreme tips indistinctly paler ; remainder of the legs brown, on the tarsi passing into darker brown. Wings grey with a sparse brown pattern that is confined to the veins, the principal spots as follows : at tip of *Sc* and origin of *Rs* ; fork of *Rs* ; tip of R_1 ; along cord ; at tips of longitudinal veins ; one before mid-length of *M* and another less distinct spot before the end of *M* ; a series of about three small spots along *Cu* ; an indistinct series in cell *C* ; two spots along vein 2*nd A* ; wing-axil darkened ; veins pale, darker in the infuscated areas. Venation : *Sc* short, Sc_1 extending a short distance beyond the origin of *Rs* ; *Rs* about equal to the deflection of R_{4+5} and approximately in alignment with it, both gently arcuated ; cell 1*st* M_2 very irregular, situated far out in the membrane ; inner end greatly arcuated, about as long as the basal deflection of Cu_1 ; *m* short, from one-third to one-quarter the length of the outer deflection of M_3 ; basal deflection of Cu_1 at or some distance before the fork of *M*.

Abdomen brown. Male hypopygium with the ventral pleural appendage relatively small but fleshy ; dorsal pleural appendage a powerful chitinized black hook, the tip acute.

Hab. Cameroun.

Holotype, ♂, Batanga, June 12, 1920 (*J. A. Reis*).

Allotopotype, ♀, August 12, 1920.

Dicranomyia mendica, sp. n.

Antennæ dark brown; head grey pruinose, the vertex with a median dark line; mesonotum yellowish brown, præscutum with three brown stripes; femora dark brown, the tips conspicuously yellow; wings greyish subhyaline, stigma brown; *Sc* long, cell 1*st* M_2 closed; abdominal segments dark brown, the caudal margins of the segments broadly pale.

Male.—Length 5·5 mm.; wing 6·6 mm.

Female.—Length 6 mm.; wing 7 mm.

Rostrum slightly produced, brown; palpi dark brown. Antennæ dark brown, the elongate terminal segment paler brown; flagellar segments elongate-oval. Head light grey, the vertex with a dark, elongate, median stripe.

Pronotum yellowish testaceous, dark brown medially. Mesonotal præscutum with three conspicuous dark brown stripes, the median stripe longest and broadest; lateral stripes indistinctly delimited at their anterior ends; pale interspaces narrow; lateral margins of præscutum sparsely pruinose; scutum testaceous, the lobes dark brown; scutellum and postnotum sparsely pruinose. Pleura testaceous; a brownish area on mesepisternum. Halteres yellow, the knobs dark brown. Legs with the coxæ and trochanters concolorous with the pleura; femora testaceous basally, passing into dark brown before the tips; apices conspicuous pale yellow; remainder of the legs dark brown. Wings greyish subhyaline, the costal and subcostal cells slightly more saturated; stigma oval, brown; veins dark brown. Venation: *Sc* long, Sc_1 extending to about opposite four-fifths *Rs*; Sc_2 at tip of Sc_1; *Rs* long, gently arcuated; *r* at tip of R_1; basal deflection of R_{4+5} about equal to or a little longer than the deflection of M_{1+2}; cell 1*st* M_2 about as long as the outer section of Cu_1; basal deflection of Cu_1 at, or immediately before, the fork of *M*, longer than Cu_2.

Abdominal segments dark brown, the posterior margins of the segments broadly pale.

Hab. Cameroun.

Holotype, ♂, Bidu, July 24, 1920 (*J. A. Reis*).

Allotopotype, ♀.

Paratopotype, ♀.

Dicranomyia submendica, sp. n.

General coloration brownish yellow, the thoracic pleura

with a conspicuous dark brown longitudinal stripe; wings uniformly pale brown, stigma small, subcircular; *Sc* long, cell 1*st* M_2 closed; abdominal tergites dark brown, sternites obscure yellow, the caudal margins of the segments dark brown; pleural appendage of male hypopygium subequally bifid.

Male.—Length about 5 mm.; wing 5·3 mm.

Female.—Length 5·7 mm.; wing 5·5 mm.

Rostrum and palpi dark brown. Antennæ dark brown, the oval flagellar segments densely white pubescent. Head grey.

Mesonotal præscutum obscure brownish yellow with three ill-defined darker brown stripes, the lateral stripes paler anteriorly, behind crossing the suture and suffusing the scutal lobes. Pleura testaceous yellow with a conspicuous dark brown dorsal longitudinal stripe. Halteres dark brown, the base of the stem conspicuously light yellow. Legs with the coxæ and trochanters testaceous yellow; remainder of the legs dark brown, the femoral bases slightly paler. Wings with a uniformly pale brown tinge; stigma small, subcircular in outline, dark brown; veins dark brown. Venation: *Sc* long, Sc_1 ending immediately before mid-length of *Rs*, Sc_2 at tip of Sc_1; *Rs* long, feebly angulated at origin; cell 1*st* M_2 closed; basal deflection of Cu_1 at or beyond the fork of *M*.

Abdominal tergites dark brown, the ninth tergite obscure yellow; sternites obscure yellow, the caudal margins dark brown. Male hypopygium with the single fleshy pleural appendage profoundly bifid into two subequal, digitiform, hairy lobes. Ovipositor with the bases of the powerful sternal valves blackened.

Hab. Cameroun.

Holotype, ♂, Lolodorf, November 16, 1920 (*J. A. Reis*).

Allotopotype, ♀.

Dicranomyia submendica is undoubtedly related to *D. fuscopleura*, but is readily distinguished by the larger size and structure of the male hypopygium.

Trentepohlia (*Mongoma*) *dummeri*, sp. n.

Similar to *T. fragillima*; white femoral tips narrow; white tibial tips occupying a little less than one-third the length of the segment; wings grey, the tips darkened; abdominal sternites obscure yellow.

Male.—Length 10–11 mm.; wing 9–10·2 mm.

Female.—Length about 10 mm.; wing 9·2 mm.

Rostrum yellow, brown in some specimens; palpi dark brown. Antennæ with the first scapal segment yellow, the remainder dark brown. Front and anterior part of vertex obscure yellow; remainder of head dark brown.

Mesonotum brown, the pleura obscure yellowish testaceous. Halteres dark brown. Legs with the coxæ and trochanters yellowish testaceous; femora dark brown, the tips rather narrowly (1·1 mm.) white; tibiæ dark brown, the bases narrowly (1·4 mm.) white, the tips rather broadly (5–5·2 mm.) white; the broad brown tibial band is about twice the pale tip; tarsi white; fore femora with two delicate bristles a short distance beyond the base. Wings grey; stigma dark brown; cell *Sc* and wing-tip darkened; indistinct seams along cord and vein *Cu*; veins dark brown. Venation: *r* on R_{2+3} before the fork, a distance less than *m*.

Abdominal tergites dark brown; sternites obscure yellow.

Hab. Uganda.

Holotype, ♂, Mabira Forest, Kyagwe Country, altitude 4000 feet, August 12, 1920 (*R. A. Dummer*).

Allotopotype, ♀, August 10, 1920.

Paratopotypes, 2 ♂'s, August 9, 1920.

"Along a stream in forest."

There can be no doubt but that many African species of *Trentepohlia* answer the brief characterization of *T. fragillima* (Westwood). Mr. Edwards informs me that the type of the latter is not now in the Hope Collections in the Oxford Museum and may no longer be in existence. The present species differs from *T. fragillima* in the conspicuously larger size and the coloration of the abdominal and thoracic sternites. The degree of whitening of the tibial tips in *T. fragillima* is not known. I take pleasure in naming this fly after the collector, Mr. R. A. Dummer.

Trentepohlia (*Trentepohlia*) *nigricolor*, sp. n.

General coloration shiny black; halteres yellow; posterior coxæ testaceous yellow; a single strong bristle on posterior tibiæ before tips; wings whitish subhyaline, cross-banded with brown, the centre of cell R_2 pale; abdomen black, the genital segment obscure reddish.

Male.—Length 6·3 mm.; wing 5·6 mm.

Female.—Length about 6·5 mm.; wing 5·7 mm.

Rostrum, maxillary and labial palpi dark brown. Antennæ dark brown throughout; flagellar segments cylindrical. Head dark grey; eyes of male large, the vertex between them very narrow.

Thorax shiny black, the humeral region not brightened. Halteres light yellow. Legs with the coxæ brownish testaceous, the fore coxæ darkest, the posterior coxæ testaceous yellow; trochanters obscure yellowish brown; remainder of the legs brown, the tarsi very slightly paler; a long curved bristle before tip of hind tibia in both sexes; in the males, at least, a similar bristle may occur on the tibiæ of other legs. Wings whitish subhyaline; cells *C* and *Sc* more yellowish; conspicuous dark brown bands on the wing; a basal area occupying the bases of cells *R* to 1*st A*; a band at the cord, broadened out in the base of cell 1*st* R_1, the centre of this area varying from pale to almost solid, the mark extended along the cord and vein *Cu* as broad conspicuous seams; distal band occupying the wing-tip, but centre of cell R_2 distinctly pale; veins brown, more yellowish in the pale costal areas. Venation: *Rs* in alignment with the deflection of R_{1+5}; R_{2+3} strongly arcuated, tip of R_1 and *r* very pale, subatrophied; cell R_3 spoon-shaped, greatly dilated on its proximal half, the outer half narrow and with parallel sides; basal deflection of Cu_1 immediately before the fork of *M*; fusion of Cu_2 and 1*st A* slight.

Abdomen black, the genital segment in both sexes obscure reddish.

Hab. Cameroun.

Holotype, ♂, Efulan, June 5, 1920 (*J. A. Reis*).

Allotopotype, ♀.

Paratopotypes, 1 ♂, 1 ♀.

Trentepohlia (*Trentepohlia*) *nox*, sp. n.

General coloration black; knob of halteres brown; legs brownish yellow, the tips of the femora conspicuously brownish black; posterior tibiæ with three or four bristles before tips; wings pale greyish subhyaline; veins conspicuously seamed with brown; centre of the large cell 1*st* R_1 pale; wing-tip darkened, this including all of cell R_2; *Rs* about one-half longer than the first section of R_{2+3}.

Female.—Length 7 mm.; wing 6·9–7 mm.

Mouth-parts yellow; palpi dark brown. Antennæ dark brown. Head dark brown.

Mesonotum shiny brownish black, the extreme anterior margin of præscutum on either side of median area obscure yellow. Pleura shiny dark brown. Halteres dark brown, the base of the stem pale. Legs with the coxæ and trochanters obscure yellow; femora brownish yellow, the tips

rather narrowly but conspicuously dark brownish black; tibiæ pale brownish yellow, the extreme base indistinctly darkened; tarsi concolorous; posterior tibiæ with three or four rather powerful black bristles just before the tip. Wings pale greyish subhyaline; wing-veins and apex suffused with brown; cells *C*, *Sc*, and most of *2nd* R_1 more greyish yellow; the brown seams are most conspicuous along *Rs*, the cord, *Cu* and its branches, and all the veins beyond the cord with the exception of the distal section of R_{2+3}; the darkened wing-tip includes all of cell R_2, the ends of *2nd* R_1 and *2nd* M_2, the distal three-fifths of R_3, and the distal half of R_5; stigma oval, darker brown; veins dark brown. Venation: *Rs* long, gently arcuated at origin, about one-half longer than the first section of R_{2+3}; first section of R_{2+3} a little longer than the second section; petiole of cell R_5 short, about equal to the basal deflection of R_{4+5}; fusion of C_1 and *1st A* punctiform.

Abdominal tergites black; sternites conspicuously bicolorous, the basal three-fifths of the intermediate segments yellow, the caudal margins conspicuously blackened; a black subterminal ring; ovipositor bright chestnut horn-colour.

Hab. Cameroun.

Holotype, ♀, Lolodorf, January 15, 1919 (*J. A. Reis*).

At first sight, *Trentepohlia nox* bears a considerable resemblance to *T. nigricolor*, sp. n., but is readily told by the coloration of the legs, wings, and abdomen, and the venational details, especially the very long sector and the short petiole of cell R_5.

Trentepohlia (*Trentepohlia*) *hyalina*, sp. n.

General coloration yellowish; posterior tibiæ with three powerful bristles before tip; wings hyaline or nearly so.

Female.—Length 6·6 mm.; wing 5·2 mm.

Rostrum and palpi yellow. Antennæ with the scapal segments yellow; flagellum broken. Head pale yellow.

Pronotum with long erect setæ. Mesonotum rather bright yellowish; humeral region and præscutal interspaces with erect setæ. Pleura yellow; mesopleura setiferous. Legs pale yellowish testaceous throughout; legs all detached, but what from analogous species would appear to be the posterior legs are armed as follows: femora at base with a series of about fifteen spinous bristles that are subequally spaced; tibiæ before tips with three very long and powerful black bristles that are about equidistant from one another

and from the tibial apex. Wings nearly hyaline; costal and subcostal cells indistinctly yellowish; stigma lacking; veins brown, those in costal area more yellowish. Venation: *Rs* long, straight, in alignment with R_{4+5}; *r* connecting with R_{2+3} about one-half its length before the fork; petiole of cell R_5 about equal to basal deflection of Cu_1, the latter a short distance before the fork of *M*; fusion of Cu_2 and 1*st A* punctiform.

Abdomen brown, the basal tergites more yellowish.

Hab. Cameroun.

Holotype, ♀, Batanga, July 14, 1920 (*J. A. Reis*).

Trentepohlia (*Trentepohlia*) *pomeroyi*, sp. n.

General coloration brown, the pleura and lateral margins of the mesonotum yellow; tibiæ and tarsi obscure whitish; wings whitish subhyaline, marked with brown; the large cell 1*st* R_1 largely pale; cell R_2 largely dark-coloured; abdominal tergites dark brown, sternites obscure yellow, the caudal margins of the segments broadly dark brown.

Male.—Length about 5·5 mm.; wing 4·6 mm.

Female.—Length about 5 mm.; wing 5 mm.

Rostrum obscure yellow; palpi dark brown. Antennæ brownish black. Anterior part of vertex dark brown, the remainder pale brownish yellow.

Mesonotum brown medially, the lateral margins brightening into yellow, the scutellum and postnotum darker brown. Pleura testaceous yellow, the mesosternum a little darker. Halteres dark brown, the base of the stem yellow. Legs with the coxæ rather bright yellow; trochanters testaceous; femora brown, the tips very narrowly and indistinctly paler; tibiæ and tarsi obscure whitish; in the types only the fore and middle legs are attached, and in these the tibiæ are unarmed. Wings whitish subhyaline, in the female the costal and subcostal cells more yellowish, in the male more brownish; conspicuous brown seams at the origin of *Rs*, tip of R_1, and *r*, continued as paler brown seams along *Rs*, R_{2+3}, the cord, and *Cu*; the wing-tip in cells R_2, R_3, and R_5 is pale brown, the centre of cell R_2 sometimes paler; veins dark brown; in the female, veins *C*, *Sc*, *R*, and the distal section of R_{2+3} yellow; cell 1*st* R_2 is large and with the centre conspicuously pale. Venation: *Rs* longer than the first section of R_{2+3}, cell 1*st* R_1 consequently elongate-triangular; cell R_5 narrow, its petiole about twice

(♀) to thrice (♂) the basal deflection of M_{1+2}; basal deflection of Cu_1 before the fork of M; cell *2nd A* narrow.

Abdominal tergites dark brown; sternites obscure yellow, the caudal margins broadly dark brown.

Hab. Nigeria.

Holotype, ♂, Effon Forest, November 10, 1920 (*A. W. J. Pomeroy*).

Allotopotype, ♀.

"In holes in big trees." Species of crane-flies taken in these same situations include *Dicranomyia* (*Thrypticomyia*) *nigeriensis*, *Rhamphidia flavitarsis*, and *Megistocera filipes*.

Holotype in the collection of the British Museum (Natural History).

Trentepohlia pomeroyi is a very distinct species that finds its only close described relative in *T. exornata*, Bergroth, from which it is readily told by the diagnostic characters listed above. The fly is dedicated to the collector, my friend, Lieut. Arthur W. Jobbins Pomeroy, of the British Expeditionary Force.

Dolichopeza (*Trichodolichopeza*) *albogeniculata*, sp. n.

General coloration dark brown; palpi yellow; legs dark brown, the knees narrowly whitish; tarsi fading into yellowish; wings dark grey, stigma dark brown; wing-tip and veins seamed with brown; conspicuous obliterative areas before and beyond the stigma.

Female.—Length 10·4 mm.; wing 10·8 mm.

Frontal prolongation of the head brown; palpi yellow; the basal segment brown. Antennæ dark brown, the scapal segments yellow. Head brown.

Mesonotum dark brown, the humeral regions of the præscutum obscure yellow. Pleura badly crushed in the unique type, variegated with brown and obscure yellow. Halteres dark brown, the base of the stem yellow. Legs with the coxæ brown; femora dark brown, the tips narrowly but conspicuously whitish; tibiæ dark brown, the bases narrowly whitish, this area about equal in extent to the pale femoral tips; tarsi pale brownish yellow, becoming paler and more conspicuous toward the end of the organ; terminal tarsal segment brown. Wings dark grey, variegated with brown and whitish subhyaline; stigma dark brown; wing-tip in cells R_2 to Cu_1 narrowly seamed with dark brown; cord and longitudinal veins narrowly seamed with brown; whitish subhyaline obliterative areas before and beyond the

stigma ; conspicuous macrotrichiæ in cells R_2 to *2nd* M_2, most numerous in cell R_5 where they include about the outer half of the cell. Venation : *Rs* very short, almost transverse, about equal to *r–m*; distal section of R_2 obliterated ; petiole of cell M_1 subequal to or a little longer than the petiole of cell *2nd* M_2; fusion of Cu_1 and *M* about four-fifths of the basal deflection of Cu_1.

Abdomen dark brown, the tergites with a conspicuous pale yellow lateral area beyond mid-length of the sclerite.

Hab. Uganda.

Holotype, ♀, Mabira Forest, Kyagwe Country, altitude 4000 feet, August 12, 1920 (*R. A. Dummer*).

"Bobbing up and down on a tree-trunk between the buttresses."

Xenotipula, gen. nov.

Frontal prolongation of the head short and stout ; no nasus. Antennæ very short in both sexes, composed of 13 segments, the first flagellar segment conspicuously enlarged, suboval, narrow at the base, provided with a few scattered bristles ; remaining flagellar segments small, irregularly cylindrical, the terminal three segments closely approximated. Palpi of moderate length, the terminal segment a little shorter than the third. Legs of the male much longer than those of the female; tibiæ with two conspicuous curved spurs. Wings with Sc_1 atrophied ; tip of R_2 atrophied or nearly so; but two branches of media reaching the wing-margin. Wings of the female smaller than those of the male. Male hypopygium of simple structure, the pleural appendages spinose posteriorly at the base. Ovipositor with the valves short and fleshy.

Genotype.—*Xenotipula munroi*, sp. n. (Southern Ethiopian Region).

Xenotipula is a very peculiar genus of Tipuline crane-flies. Together with *Idiotipula*, Alexander (Natal), and *Pseudoleptotarsus*, Alexander (Australia), the genus is readily told from all other members of the subfamily Tipulinæ by the presence of only two branches of media. *Xenotipula* is told from *Idiotipula* by the tibial spurs, the very short antennæ in both sexes, the lack of vein Sc_1, and the fleshy ovipositor. The curious discrepancy in the size of the two sexes is discussed in the collector's field-notes following the specific description.

Xenotipula munroi, sp. n.

Male with the wings and legs much larger and longer than those of the female; general coloration brownish testaceous, the mesonotum unmarked with darker; wings yellowish grey; Sc_2 ending opposite mid-length of *Rs*; cell 1*st* M_2 narrowed outwardly; cell 2*nd A* moderate in width.

Male.—Length about 6–6·5 mm.; wing 8·5–9 mm. Fore leg, femur 4·6 mm.; tibia 5·5 mm.; hind leg, femur 6 mm.; tibia 5·4 mm.; tarsus about 18 mm.

Female.—Length 6 mm.; wing 5–6·3 mm. Hind leg, femur 3 mm.; tibia 3 mm.; tarsus about 5·5 mm.

Male.—Frontal prolongation of the head very short and stout, yellowish brown; nasus lacking; palpi light brown. Antennal scapè light yellow; first flagellar segment testaceous; remainder of the flagellum dark brown. Head brown, broadly yellowish adjoining the inner margins of the eyes; vertex between the eyes very broad.

Mesonotum pale brownish testaceous without darker markings. Pleura pale testaceous yellow. Halteres light brown, the knobs a little darker. Legs with the coxæ pale testaceous yellow; trochanters pale yellow, each with a conspicuous brown spot on the posterior face; remainder of the legs testaceous brown; fore tibiæ a little longer than the fore femora; hind tibiæ shorter than the hind femora; tarsi very long and slender, the metatarsi alone much longer than the combined femur and tibia; claws small, simple. Wings with a strong yellowish-grey tinge; stigma darker, brown; veins brown. Venation: Sc_2 ending about opposite mid-length of *Rs*, Sc_1 lacking; *Rs* long, gently arcuated at origin; R_{2+3} about two-thirds of *Rs*; tip of R_1 subatrophied; outer section of R_2 atrophied or barely persistent; only two branches of media reach the wing-margin; cell 1*st* M_2 long-pentagonal, narrowed outwardly, *m* being less than one-third the outer deflection of M_3; *m–cu* distinct; cell Cu_1 deep, Cu_2 being about one-half longer than the basal deflection of Cu_1; vein 2*nd A* almost straight, cell 2*nd A* of moderate width. Macrotrichiæ on the penultimate section of R_1, on R_{2+3}, R_3, and R_{4+5}.

Abdominal tergites pale brown, the caudal margins darker; sternites more yellowish testaceous. Hypopygium of simple structure. Ninth tergite short, the posterior margin notched, the surface and margin of the tergite with conspicuous bristles. Ninth sterno-pleurite elongate, the

pleural appendages at the end, these latter flattened, the posterior margin at the base with a few stout black spines.

Female.—About equal in size of body to the male, but the wings smaller and the legs very small and slender. The abdomen is greatly distended with large eggs, which condition, together with the delicate nature of the wings, probably renders this sex flightless, at least until oviposition is accomplished. All of the females available for study are teneral, the wings being pale and badly folded, the venation less distinct than in the male but agreeing in all essentials. The teneral nature of the females would lead us to believe that copulation takes place while the female is still teneral, a condition found in many other Tipulidæ. Ovipositor with the valves very small and fleshy, the sternal valves extending beyond the tergal ones.

Hab. Natal.

Holotype, ♂, Ambleside, near Port Shepstone, August 23, 1920 (*H. K. Munro*).

Allotopotype, ♀.

Paratopotypes, 15 ♂'s, 5 ♀'s.

This very interesting species is dedicated to its collector, my friend, Mr. H. K. Munro. The collector's full notes on this species are of unusual interest.

"Found on Ambleside near Port Shepstone on steep hillside, some distance from river. Conditions very dry—rain had not yet begun. Hillside covered with original bush and trees, undergrowth not very dense. Ground covered thickly with dead leaves. Large numbers of this fly were observed, most of them flying very close to the ground, in fact touching the dead leaves, so that it was not possible to catch them by beating without getting so many leaves that the flies, which were very fragile, were ruined. A few were flying up among the bushes. I soon observed that all those flying were males, except only a very few females flying '*in cop.*' After watching them for some time I noticed the flying males congregated in indiscriminate *mêlées* in certain spots. When these were examined, I saw that on the ground at each spot was a female with a very greatly distended abdomen. One male was *in copula* and the rest were flying around.

"The legs of the males are longer than those of the females. Like many of the Tipulidæ, individual insects were hard to follow owing to their very light and cob-webby appearance."—*H. K. Munro.*

Tipula camerounensis, sp. n.

General coloration of mesonotum light brown; pleura whitish yellow; mesonotum densely covered with short setæ; wings pale grey; stigma dark brown; male hypopygium with the sclerites fused into a ring, the median lobe of the ninth tergite narrow, the tip split by a V-shaped notch into two flattened lobes.

Male.—Length 16·5 mm.; wing 17 mm.; antenna about 5 mm.

Frontal prolongation of the head ferruginous; palpi dark brown. Antennæ of moderate length, scape testaceous, flagellum dark brown. Head ferruginous brown.

Mesonotum light brown without darker markings, the surface densely covered with short setæ. Pleura pale whitish yellow, unmarked. Halteres dark brown. Legs with the coxæ and trochanters testaceous; remainder of legs brown; claws of male apparently simple. Wings with a uniformly pale grey tinge; cell *Sc* brownish yellow; an inconspicuous brown seam along *r–m* and the basal deflection of R_{4+5}; stigma narrow, dark brown; veins dark brown. Venation: *Rs* short, about as long as the petiole of cell M_1; cell R_2 shorter than R_3, the proximal end acute.

Abdominal tergites dark brown, the sternites more yellowish; hypopygium brownish yellow. Male hypopygium as in this group of species, the sclerites fused into a ring; ninth tergite with the median lobe produced into a narrow depressed blade, the apex split into two flattened lobes.

Hab. Cameroun.

Holotype, ♂, Elat, 1920 (*J. A. Reis*).

Tipula oryx, sp. n.

General coloration liver-brown, the pleura yellowish striped longitudinally with dark brown; mesosternum dark brown; wings pale grey, the costal and subcostal cells dark brown; abdomen with a brownish-black subterminal ring; male hypopygium with the sclerites of the ninth segment fused into a ring; median lobe of the ninth tergite narrow, the caudal margin with a U-shaped notch.

Male.—Length 21 mm.; wing 19 mm.; antenna about 10 mm.

Frontal prolongation of the head dull rufous, darker laterally; palpi dark brown. Antennæ very long and slender, if bent backward extending almost to mid-length

of the abdomen; first scapal segment fulvous; second segment fulvous; remainder of the organ dark brown. Head fulvous.

Mesonotal præscutum and scutum liver-brown, margined sublaterally with black, the extreme lateral margins pale; scutellum greenish testaceous medially; postnotum with the median sclerite dull fulvous, margined with dark brown. Pleura yellowish, marked longitudinally with dark brown, this colour extending across the dorsal margin of the lateral sclerite of the postnotum. Mesosternum dark brown, yellowish medially. Halteres dark brown, the extreme base paler. Legs with the coxæ dark brown on the outer face, the apices yellow; trochanters yellow; remainder of legs brown; femoral tips broadly brownish black; claws of male toothed. Wings with a pale grey tinge, the costal cell brown, the subcostal cell and stigma dark brown; a faint brown seam along *r–m* and the deflection of R_{4+5}. Venation: *Rs* shorter than R_{2+3}; petiole of cell M_1 shorter than *m*.

Abdomen brownish testaceous, the caudal margins of the segments narrowly infuscated; segments 6 to 8 dark brownish black; hypopygium reddish yellow, with greenish tints. Male hypopygium with the sclerites fused into a ring. Ninth tergite with the elongate median lobe narrow, depressed, the caudal margin with a U-shaped notch, the adjacent lobes slightly divergent, unarmed.

Hab. Cameroun.

Holotype, ♂, Elat, 1920 (*J. A. Reis*).

XVI.—*Notes on the* Asilinæ *of the South African and Oriental Regions.* By Gertrude Ricardo.

Promachus beesoni, ♂ ♀, sp. n.

Type (male) and four other males, type (female) and one other female, all from Mohnyin River, Katha, Burmah (*C. F. C. Beeson*), caught between May 15th and 25th in 1918. In the Forest Research Zool. Coll. some of the specimens have the appearance of only just having emerged from the pupæ.

A large blackish species with long yellow hairs on the legs, which are chiefly black. Moustache, beard, and hairs of palpi yellow. Genitalia large, black-haired; ovipositor